

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous versions and listings of claims in this application.

Claim Listing:

1. (Currently amended) A method for arranging error control of packet-switched data, the method comprising:

selecting during connection set-up conditions that apply for processing of a first part and a second part of a packet in an error situation;

receiving the first part and the second part on separate logical connections;

detecting errors in received data;

checking, in response to an error detected in a received first part and/or second part whether said conditions allow the first part or second part to be transmitted to upper protocol layers; and

transmitting, in response to said conditions allowing it, only the first part or the second part to the upper protocol layers,

wherein the first part comprises header fields and the second part comprises payload, wherein the header fields are used for decompression, even if said conditions prevented their transmission to the upper protocol layers.

Claims 2-4: (Canceled).

5. (Original) A method according to claim 1, further comprising:

indicating to the upper layers an error detected in the first part and/or second part of the packets to be transmitted.

6. (Original) A method according to claim 1, wherein the error detection is performed on data units received on a physical layer and comprising the first part and the second part;

an error indication is added to erroneous data units; and

it is checked whether said data units meet said conditions.

7. (Previously Presented) A method according to claim 1, wherein a radio resource control protocol RRC is used for the management of radio resources, wherein said conditions are determined by means of RRC signaling between a packet radio network and a mobile station; and
a data link layer entity is configured to carry out said check.

8. (Previously Presented) A method according to claim 1, wherein the logical connections are handled by RLC entity of a radio link control layer; and
the RLC entities are provided with a command instructing whether an erroneous data unit is to be transmitted to an upper layer or not.

9. (Previously Presented) A method according to claim 1, wherein a PDCP entity of a packet data convergence protocol layer is responsible for separating the first part and the second part and for combining them; and
said conditions are checked in the PDCP entity, in response to an indication that the first part and/or the second part in one and the same packet are erroneous.

10. (Previously Presented) A method according to claim 1, wherein different conditions apply for a mobile station than for a network element providing logical connections.

11. (Currently amended) A packet radio system for transferring packet-switched data wherein
the packet radio system is configured to select, during connection set-up, conditions for handling of errors detected at least in first parts and second parts of packets;
the packet radio system is configured to receive the first part and the second part on separate logical connections;
the packet radio system is configured to detect errors in received packet-switched data;
the packet radio system is configured to check, in response to a detected error in the received first part and/or second part whether said conditions allow the first part or second part to be transferred to upper layers; and
the packet radio system is configured to transmit, in response to said conditions allowing the transmission, only the first part or the second part to upper protocol layers,
wherein each of the first parts comprise header fields.

wherein the packet radio system is configured to use header fields for decompression, even if said conditions prevented their transmission to the upper layers.

12. (Currently amended) A packet radio system according to claim 11, wherein the ~~first part comprises header fields and the second part~~ comprises payload.

13. (Cancelled)

14. (Previously Presented) packet radio system according to claim 11 , wherein a radio resources control protocol RRC is used for the management of radio resources,
the packet radio network of the packet radio system is configured to determine said conditions by means of RRC signaling to the mobile station; and
the mobile station and the packet radio network are configured to command the data link layer entity to carry out said check.

15. (Currently amended) A mobile station comprising:
means for transferring packet-switched data;
means for selecting, during connection set-up, conditions that apply for processing of a first part and a second part of a packet in an error situation;
means for receiving a first part and a second part of a packet on separate logical connections;
means for detecting errors in received data;
means for checking, in response to an error detected in the received first part and/or second part whether said conditions allow only the first part or second part to be transmitted to upper protocol layers; and
means for transmitting, in response to said conditions allowing it, the first part or the second part to the upper protocol layers,
wherein the first part comprises header fields and the second part comprises payload,
wherein the apparatus is configured to use header fields for decompression, even if said conditions prevented their transmission to the upper protocol layers.

16. (Currently amended) A network element comprising:
means for transferring packet-switched data;

means for selecting_a during connection set-up_a conditions that apply for processing of a first part and a second part of a packet in an error situation;

means for receiving a first part and a second part of a packet on separate logical connections;

means for detecting errors in received data;

means for checking, in response to an error detected in the received first part and/or second part_a whether said conditions allow the first part or second part to be transmitted to upper protocol layers; and

means for transmitting, in response to said conditions allowing it, only the first part or the second part to the upper protocol layers_a

wherein the first part comprises header fields and the second part comprises payload, wherein the apparatus is configured to use header fields for decompression, even if said conditions prevented their transmission to the upper protocol layers.

17. (Currently amended) An apparatus configured to receive packet-switched data, wherein

the apparatus is configured to select during connection set-up conditions that apply for processing of a first part and a second part of a packet in an error situation;

the apparatus is configured to receive a first part and a second part of a packet on separate logical connections;

the apparatus is configured to detect errors in received data;

the apparatus is configured to check, in response to an error detected in a received first part and/or second part whether said conditions allow only the first part or second part to be transmitted to upper protocol layers; and

the apparatus is configured to transmit, in response to said conditions allowing it, the first part or the second part to the upper protocol layers_a

wherein the first part comprises header fields and the second part comprises payload, wherein the apparatus is configured to use header fields for decompression, even if said conditions prevented their transmission to upper layers.

Claims 18-20: (Cancelled).

21. (Previously Presented) An apparatus according to claim 17, wherein the apparatus is configured to indicate to the upper layers an error detected in the first part and/or second part of the packets.

22. (Previously Presented) An apparatus according to claim 17, wherein the error detection is performed on data units received on a physical layer and comprising the first part and the second part;

an error indication is added to erroneous data units; and
it is checked whether said data units meet said conditions.

23. (Previously Presented) An apparatus according to claim 17, wherein the apparatus is configured to use a radio resource control protocol RRC for the management of radio resources, wherein

the apparatus is configured to determine said conditions by means of RRC signaling between a packet radio network and the apparatus; and

the apparatus is configured to provide a data link layer entity configured to carry out said check.

24. (Previously Presented) An apparatus according to claim 17, wherein the apparatus is configured to handle the logical connections by an RLC entity of the radio link control layer; and

the apparatus is configured to provide the RLC entity with a command instructing whether an erroneous data unit is to be transmitted to an upper layer or not.

25. (Previously Presented) An apparatus according to claim 17, wherein the apparatus is configured to provide a PDCP entity of a packet data convergence protocol layer responsible for separating the first part and the second part and for combining them; and

the PDCP entity is configured to check said conditions in response to an indication that the first part and/or the second part in one and the same packet are erroneous.

26. (Previously Presented) An apparatus according to claim 17, wherein different conditions apply for a mobile station than for a network element providing logical connections.